



Male mESCs day2 (E14) replicate1



Male NPCs (E14)



Male MEFs replicate1



Male mESCs (TT2) replicate1



Male mESCs (EED<sup>-/-</sup>)







Male NPCs (E14) replicate2 1Mb

Female MEFs replicate1



Male mESCs (TT2) replicate2



Male mESCs (EED) replicate2



#### Female mESCs (PGK12.1) replicate1



Male mESCs day2 (E14) Female mESCs day2 (PGK12.1) replicate1 1Mb









Male mESCs (TT2-G9a<sup>-/-</sup>) replicate1



X0 mESCs ( $\Delta$ XTX) replicate1



Male mESCs (TT2-G9a<sup>-/-</sup>) 1Mb





1Mb

median count in 30kb window 98% of max

0

\*



Colocalisation index (Pearson's coefficients)

\* p<8\*10<sup>-3</sup> \*\* p<7\*10<sup>-4</sup> \*\*\* p<10<sup>-10</sup>

100< n <119 33< n <36











400 600 0 200 inter-gene distance [kb] inter-gene distance [kb] inter-gene distance [kb]





genes on X

















с





d RNA FISH undifferentiated Female mESCs







b

с

Nuclear / Cytoplasmic RNA ratio undifferentiated mESCs







а

# RNA FISH on differentiating female mESCs



с

#### Linx (wi1-1985N4) Tsix (DXPas34) Xist (strand-specific)



d % alleles





DOWN-regulated upon differentiation

UP-regulated upon differentiation